

WHAT IS CLAIMED IS:

1. A multiple output power adapter comprising:
a ⁸first housing;
a ¹²second housing remote from the first housing;
an ²AC input receptacle provided in the first housing;
a single power converter circuit enclosed within the first housing and electrically connected to the AC input receptacle, the single output power converter circuit converting input AC power into a single output DC voltage; and
a DC to DC converter circuit electrically connected to the single output power converter circuit and enclosed within the second housing, the DC to DC converter circuit converting the single output DC voltage into multiple output DC voltages.
2. The multiple output power adapter according to claim 1, further comprising an electrical device connector electrically connected to the single output power converter circuit and the DC to DC converter circuit.
3. The multiple output power adapter according to claim 1, wherein the single output power converter circuit is a rectifier.
4. The multiple output power adapter according to claim 3, wherein the rectifier is a single diode circuit.
5. The multiple output power adapter according to claim 3, wherein the rectifier is a half-wave rectifier.
6. The multiple output power adapter according to claim 3, wherein the rectifier is a full-wave rectifier.

7. The multiple output power adapter according to claim 6, wherein the full-wave rectifier is a bridge rectifier.

8. The multiple output power adapter according to claim 1, wherein the DC to DC converter circuit outputs two or more separate voltage levels.

9. The multiple output power adapter according to claim 2, further comprising:

a first wire connecting the single output DC voltage of the single output power converter circuit to the electrical device connector; and

multiple wires connecting the multiple output DC voltages of the DC to DC converter circuit to the electrical device connector.

10. The multiple output power adapter according to claim 9, wherein the first wire runs from the first housing to the second housing and is branched-off within the second housing and run together with the multiple wires from the second housing to the electrical device connector.

11. A multiple output power adapter circuit comprising:
a single output power converter circuit that receives an AC voltage and converts the AC voltage into a single output DC voltage; and
a DC to DC converter circuit electrically connected to the single output power converter circuit, the DC to DC converter circuit converting the single output DC voltage into multiple output DC voltages.

12. The multiple output power adapter circuit according to claim 11, wherein the single output power converter circuit is a rectifier.

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